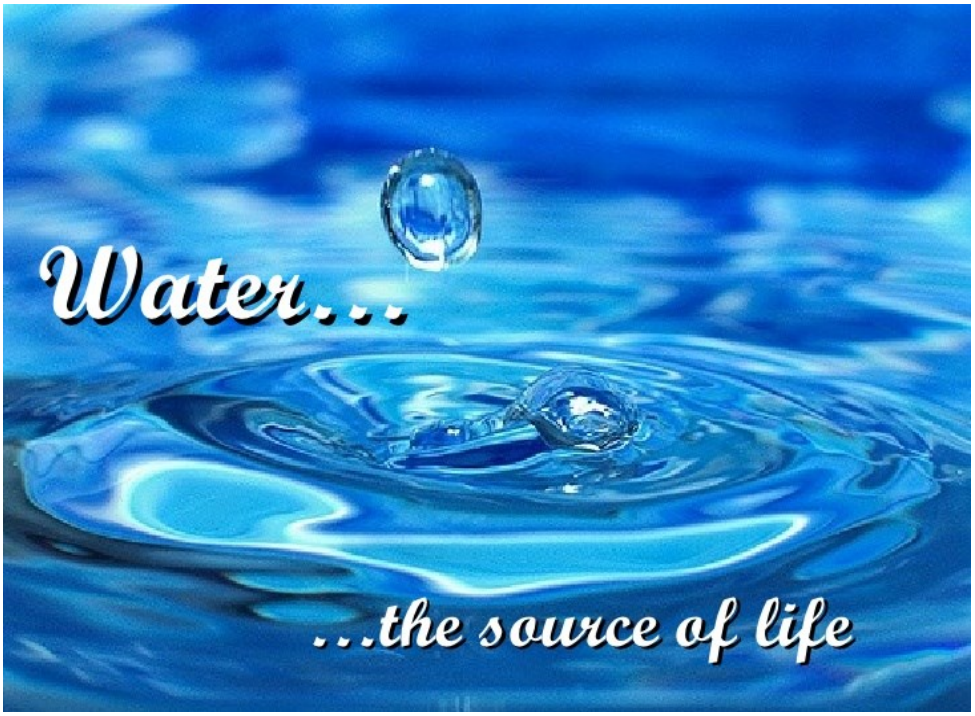
# ANNUAL DRINKING WATER QUALITY REPORT

**From January 1, 2022 through December 31, 2022**

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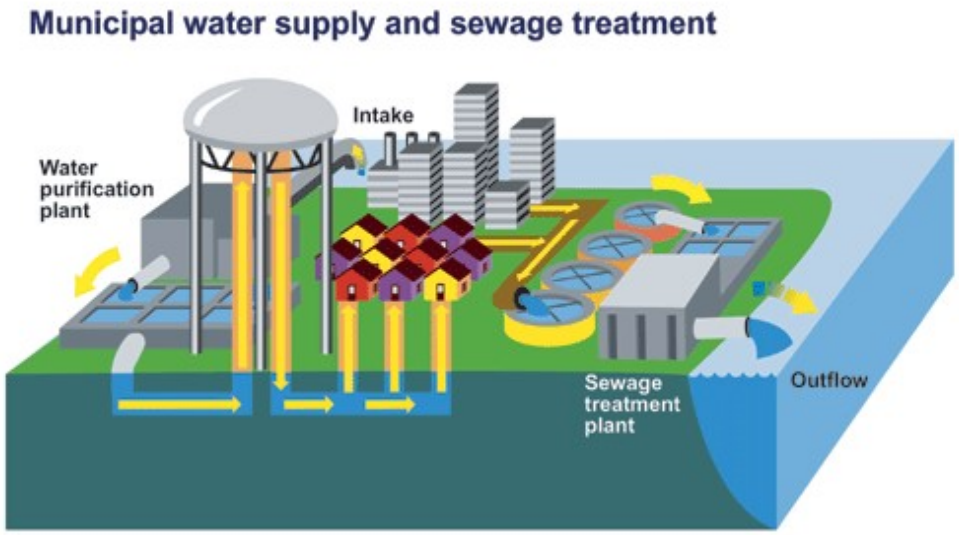


*City of Standish*

*Waste Water/Water Plant*

*Superintendent-Caleb Whitney*

*Water Operator-Lance Herman*

**Annual Drinking Water Quality Report**

**City of Standish**

**January 1, 2022 through December 31, 2022**

**We are pleased to present our Annual Drinking Water Quality Report, as a requirement of the Safe Drinking Water Act. This report allows us the opportunity to provide our customers with information regarding the quality of their tap water. We are confident that this report will assure our users that their public water supply meets state and federal regulations. While some information in this report may be technical in nature we hope that it is presented in an understandable format. Should you have any questions please contact the City of Standish City Manager, Brad Mason, at (989) 846-9588, the Water Superintendent, Caleb Whitney at (989) 846-9588 or the Standish City Council at its regular meetings held on the second Monday of each month at City Hall – 399 East Beaver Street – Standish, MI 48658.**

**Since 1967, the City of Standish has purchased raw water, which is filtered and disinfected by chlorination. In June 2004 the Michigan Department of Environmental Quality released a Source Water Assessment Report (SWAR) for our community's source of raw water. Our community is provided raw water from the Saginaw- Midland Municipal Water Supply Corporation system, which draws water from two Lake Huron water intakes, located off the shores of Whitestone Point, which is roughly 8 –miles north of AuGres, MI.**

**Included in the SWAR is a susceptibility analysis of our raw water. Susceptibility is a measure of the factors within the source water area that may pose a risk to the water supply. The Source Water Assessment Report concluded that Saginaw-Midland's intakes have a moderately low susceptibility to potential contamination. Although the threat of contamination still exists, this rating is considered excellent for a surface water source.**

**A copy of the report is available for review at Standish City Hall, located at 399 E. Beaver St.**

**The City of Standish routinely monitors your drinking water for the presence of contaminants. Monitoring is conducted according to a schedule established by the State of Michigan. The sample results in the tables below are from 2022 unless otherwise noted. All drinking water, including bottled drinking water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's (EPA) Safe Drinking Water Hotline (1-800-426-4791).**

**The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.**

**In order to ensure that tap water is safe to drink, the EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.**

**Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk for infections. These people should seek advice about drinking water from their health care providers. EPA/ Center for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791)**

**Contaminants that may be present in source water:**

**Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.**

**Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial, or domestic wastewater discharges, oil and gas production, mining, or farming.**

**Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.**

**Inorganic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.**

**Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.**

**Per– and polyfluoroalkyl Substances (PFAS)- group of chemicals that are resistant to heat, water and oil.**

**The following are definitions of terms and abbreviations which are used in the report.**

**Maximum Contaminant Level (MCL) – The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the Maximum Contaminant Level Goal's as feasible using the best available treatment technology.**

**Maximum Contaminant Level Goal (MCLG) – The level of contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.**

**Treatment Technique (TT) – A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.**

**Action Level (AL) – The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.**

**Nephelometric Turbidity Unit (NTU) – Nephelometric Turbidity Unit is a measure of the clarity of water. Less than five (5) NTU is nearly unnoticeable.**

**Parts Per Billion (Ppb) – Micrograms per liter equivalent to $ .01 in $10,000,000.00.**

**Parts Per Million (Ppm) – Milligrams per liter equivalent to $ .01 in $10,000.00.**

**Not Applicable (N/A)**

**LHA– Lifetime Health Advisory**

**Environmental Protection Agency (EPA) – The agency which establishes contaminant standards in drinking water.**

**Maximum Residual Disinfectant Level Goal (MRDLG)-- the level of a drinking water disinfectant below, which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.**

**Maximum Residual Disinfectant Level (MRDL)-- the highest level of a disinfectant allowed in drinking water. There is convincing evidence that the addition of a disinfectant is necessary for control of microbial contaminants.**

**Not Detected (ND)**

## Microbiological Contaminants

| | CONTAMINANT | YES/NO VIOLATION | LEVEL DETECTED | UNIT OF MEASUREMENT | MCL | MCLG | PROBABLE SOURCE OF CONTAMINANT |
|---|---|---|---|---|---|---|---|
| 1) | TURBIDITY* | NO | MAX.=0.10 NTU | NTU | TT | N/A | SOIL RUNOFF |
| | | | | | | | |

***Note 1 – Turbidity is a measurement of clarity of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.**

**The regulations for turbidity state that all filtered water must be at or below 5 NTU, and that filtered water must be at or below .3 NTU at least 95% of the time. In 2022, during our worst month (September), we maintained turbidity of .3**

## Inorganic Contaminants

| | Contaminant | Yes/No Violation | Level Detected | Unit of Measurement | MCL<br>AL | MCLG | Likely Source of Contaminant |
|---|---|---|---|---|---|---|---|
| 1) | Lead* | NO | 4.0 Ppb in 90th percentile | Ppb | AL = 15 ppb | 0 Ppb | Corrosion of household plumbing |
| 2) | Copper* | NO | 0.6 Ppm in 90th percentile | Ppm | AL = 1.3 PPM | 1.3 PPM | Corrosion of household plumbing |
| 3) | Chlorine | NO | AVG .51 Range = .37-.58 | Ppm | MRDL 4 Ppm | MRLDG 4 Ppm | Treatment additive to control microbes |
| 4) | Fluoride | NO | AVG .88 Range = .85-.90 | Ppm | 4 Ppm | 4 Ppm | Water additive which promotes strong teeth, erosion of natural deposits |

| PFAS Results | PFOS | PFOA | PFNA | PFHxS | PFHxA | PFBS | HFPO-DA |
|---|---|---|---|---|---|---|---|
| LHA | AL=16 | AL=8 | AL=6 | AL=51 | AL=400000 | AL=420 | AL=370 |
| Level Detected | No Detect | No Detect | No Detect | No Detect | No Detect | No Detect | No Detect |

***Note 1 – Our most recently required monitoring for lead and copper was conducted in 2020. None of our ten samples exceeded the lead or copper action levels.**

**If present, elevated levels of lead can cause serious health problem, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The City of Standish is responsible for providing high quality drinking water, but can not control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (1-800-426-4791) or at http://www.epa.gov/drink/info/lead.**

## Estimated Number of Service Connections by Line Material

| Any Portion Containing lead | Galvanized Prev. Connected to lead | Likely contains lead | Likely does NOT contain lead | Materials Unknown | Contains neither lead nor galvanized prev. connected to |
|---|---|---|---|---|---|
| 0 | 0 | 0 | 0 | 300 | 400 |

## Volatile Organic Contaminants

| | Contaminant | Yes/No Violation | Level Detected | Unit of Measurement | MCL | MCLG | Likely Source of Contaminant |
|---|---|---|---|---|---|---|---|
| 1) | *TTHM – Total Trihalomethanes | NO | Max. Avg. 33.25 Ppb Range = 18-59 Ppb | PPB | 80 PPB | N/A | By-product of Chlorination |
| 2) | *Total Haloacetic Acids | NO | Max. Avg. 13.8 Ppb Range = 6-21 Ppb | PPB | 60PPB | N/A | By-product of Chlorination |

**Note 1 – Trihalomethanes and Haloacetic acids are a by-product of disinfection of drinking water through the use of chlorine. Total trihalomethanes are the cumulative amount of the various trihalomethane compounds. Total haloacetic acids are the cumulative amount of the various haloacetic acid compounds.**

| Contaminant | Yes/No Violation | Level Detected | Unit of Measurement | MCL | Likely Source Of Contaminant |
|---|---|---|---|---|---|
| Asbestos | N/A | No Detect | Million Fibers per liter (MFL) | 7 MFL | A/C Pipe degrading over years. |

## UNREGULATED CONTAMINANTS

| | Contaminant | Yes/No Violation | Level Detected | Unit of Measurement | MCL | MCLG | Likely Source of Contaminant |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| | | | | | | | |
| **1)** | Sodium | N/A | 4.6 | Ppm | N/A | N/A | Naturally present in the environment |

**Unregulated contaminants are those for which the EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist the EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulations are warranted.**

**The City of Standish tested for PFAS in 2022.MDEQ is taking the precautionary step to test water sources to determine public health actions needed. If any resident has additional questions regarding this issue, the State of Michigan Environmental Assistance Center can be contacted at (800-662-9278). Representatives are available for questions MON-Thur 8 AM to 4:30 PM. Additional testing of the drinking water will be conducted to demonstrate that the PFAS level are consistent and reliably below existing LHA. Additional monitoring in and around our region and other areas will also be performed to help determine next steps.**

**The state has created a website where you can find information about PFAS contamination and efforts to address it in Michigan. The site will be updated as more information becomes available. The web address is http://michigan.gov/pfasresponse**

**In conclusion, we hope this report will assist our customers in evaluating the quality of their public water supply. At this time, the City of Standish water supply meets all state and federal requirements. Be assured that we will continue working toward providing our customers with high quality drinking water.**
**Copies of this report are available at Standish City Hall – 399 E. Beaver Street – Standish, MI 48658, Monday – Thursday during normal business hours. This report will not be mailed to customers except by request. To request a copy of this report, call 989-846-9588.**

# 6 Reasons to Drink Water

It's no magic bullet, but the benefits of water are many.

**Drinking Water Helps Maintain the Balance of Body Fluids**

**Water can help control calories**

**Water helps energize muscles**

**Water helps keep skin looking good**

**Water helps your kidneys**

**Proper hydration keeps your skin looking healthy**